

**ARIZONA GAME AND FISH DEPARTMENT
HERITAGE DATA MANAGEMENT SYSTEM**

Plant Abstract

Element Code: PDCON0A1K0

Data Sensitivity: No

CLASSIFICATION, NOMENCLATURE, DESCRIPTION, RANGE

NAME: *Ipomoea thurberi* A. Gray

COMMON NAME: Thurber's morning-glory, Thurber's morningglory, Thurber morningglory

SYNONYMS: *Ipomoea gentryi* Standl.

FAMILY: Convolvulaceae

AUTHOR, PLACE OF PUBLICATION: A. Gray, Synoptical Flora of North America 2(1): 212. 1878. Holotype in GH (2001) reports year of publication as "1886."

TYPE LOCALITY: Holotype in GH (2001) states "Mexico, Sonora." Missouri Botanical Garden (accessed 2004) states "USA: Arizona."

TYPE SPECIMEN: HT: GH-54547. G. Thurber 966, Sep 1857.

TAXONOMIC UNIQUENESS: A large genus, distributed worldwide in tropical and subtropical areas, containing about 500 species. According to USDA, NRCS (2002), there are 65 species in North America. In Arizona, 14 species are known to occur (Austin 1998).

DESCRIPTION: Glabrous, herbaceous perennial vine, from elongate, tuberous roots, with stems trailing. Leaves are sagittate to palmately 5-7 lobed, sparsely strigose, the lobes divergent, lanceolate, and linear to oblong, 1-5 cm long and 2-6.5 cm wide; the base is sagittate; petioles are 0.9-2 cm long. Inflorescence is 1-flowered; peduncles 3-4 mm long; bracts scale-like and about 1 mm long. Flowers consist of 7-8 mm long pedicels that are erect in fruit, and equal, lanceolate sepals, 12-15 mm long and 3-4 mm wide, acuminate apically, smooth, setaceous-caudate, sometimes obscurely warty at the base. Corollas are funnellform-salverform, 5-8 cm (2-3 in) long, white with a rose limb and green tube (drying purple), opening in the evening, glabrous, the limb 5-6.5 cm (2-2.6 in) wide. Stamens are 5.5-5.9 cm (2-2.3 in) long, exserted, with 3.5-4 mm long anthers. The ovary is ovoid, 1-1.5 mm long, 3-locular, and glabrous; styles are 5.5-5.9 cm (2-2.3 in) long. The fruit is globose to ovoid, 6-7 mm wide, the apiculum 4-5 mm long. Seeds number 3-6, are 3.5-4 mm long, ovoid, black to dark brown, and finely tomentose. (Austin 1998).

AIDS TO IDENTIFICATION: According to Austin (1998), this species is most likely to be confused with *Ipomoea tenuiloba*. Both of these species can be separated from the other species of *Ipomoea* in Arizona by this combination of characteristics: Leaves palmately dissected (less often simple with a sagittate base) and flowers 4-10 cm (1.6-4 in) long and nocturnal or matinal. Austin also uses the following characters to separate *I. tenuiloba* and *I.*

thurberi: *I. tenuiloba* - sepals chartaceous, the margins scarious; flowers 4.5-10 cm (1.8-4 in) long, white or white with purple limb. *I. thurberi* - sepals herbaceous, the margins herbaceous; flowers 5-8 cm (2-3 in) long, white with pink limb to purple when dry.

See the keys for the genus *Ipomoea* in Austin (1998) and Kearney and Peebles (1960) for more help with identification of this species.

ILLUSTRATIONS: Color photo (Bob Jarret 2003, *in* USDA, NRCS 2002).

TOTAL RANGE: From southern Arizona, and Chihuahua and Sonora (and Sinaloa?), Mexico. Reported from Nicaragua by W.D. Stevens #22449 (see W3Tropicos (MO) specimen list for *I. thurberi*).

RANGE WITHIN ARIZONA: From the Huachuca Mountains in Cochise County, the Santa Rita Mountains in Pima County, and Canelo Hills, and Patagonia and Pajarito/Atascosa mountains in Santa Cruz County.

SPECIES BIOLOGY AND POPULATION TRENDS

GROWTH FORM: Perennial herbaceous vine.

PHENOLOGY: Flowers in late July - September. Austin (1998) reports flowering period as August-September.

BIOLOGY: Sphinx moths have been observed visiting the flowers of this species.

HABITAT: Habitat in Arizona includes rocky hillsides and canyon slopes in Madrean oak woodland and semi-desert grassland communities (Brown 1994; Austin 1998). Habitat in Sonora and Chihuahua, Mexico includes meadows, seeps, and open slopes in oak and pine-oak forest (Martin et al. 1998).

ELEVATION: Approximately 3,800 - 5,150 feet (1160-1571 m) in Arizona. In Sonora and Chihuahua: approximately 2,951 – 5,574 ft. (900-1700 m), (Martin et al. 1998).

EXPOSURE: Various, but often south-facing.

SUBSTRATE: Rocky slopes.

PLANT COMMUNITY: This species occurs in Madrean oak woodland and semi-desert grassland communities. Associated species in the Atascosa/Pajarito mountains of Arizona include *Agave* sp., *Arctostaphylos* sp. (Manzanita), *Mimosa* sp., *Prosopis* sp. (Mesquite), *Quercus* sp. (oak), and several grasses.

POPULATION TRENDS: Unknown. This species had been collected from approximately 9 locations in Arizona, as of the summer of 1998.

SPECIES PROTECTION AND CONSERVATION

ENDANGERED SPECIES ACT STATUS: None.
STATE STATUS: None.
OTHER STATUS: Forest Service Sensitive (USDA, FS Region 3 1999).

MANAGEMENT FACTORS:

CONSERVATION MEASURES TAKEN: This species was listed "Forest Service Sensitive" in 1999.

SUGGESTED PROJECTS: Monitor known populations to some extent. Search for new populations in areas of suitable habitat, especially areas adjacent to known populations.

LAND MANAGEMENT/OWNERSHIP: USFS - Coronado National Forest (Nogales and Sierra Vista RDs); Private.

SOURCES OF FURTHER INFORMATION

REFERENCES:

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MAJOR KNOWLEDGEABLE INDIVIDUALS:

D. F. Austin - Florida Atlantic University, Boca Raton.

ADDITIONAL INFORMATION:

Revised: 1999-11-18 (RHB)
2000-01-14 (DJG)
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